Mr. Gregory K. Finch
BTR Antivibration Systems, Incorporated
P. O. Box 7007
Logansport, Indiana 46947-7007

Re: 017-11310-00014
Minor Source Modification to:
Part 70 permit No.: T017-7639-00014

Dear Mr. Finch:

BTR Antivibration Systems, Incorporated was issued a Part 70 operating permit T017-7639-00014 on September 2, 1999 for a fabricated rubber products manufacturing source. An application to modify the source was received on September 2, 1999. Pursuant to 326 IAC 2-7-10.5 the following emission units are approved for construction at the source:

(a) Thirteen (13) new rubber injection molding presses, identified as JD0003 through JD0015. Each molding press has a capacity of 68 pounds per hour; and

(b) The change in the coating applied by the existing permitted Chain-On Edge-Coater, ID7230, with a capacity of 1,750 pieces per hour.

The following construction conditions are applicable to the proposed new equipment:

General Construction Conditions

1. The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Management (OAM).

2. This approval to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

3. Effective Date of the Permit
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

4. Pursuant to 326 IAC 2-1.1-9 and 326 IAC 2-7-10.5(i), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.

6. Pursuant to 326 IAC 2-7-10.5(l) the emission units constructed under this approval shall not be placed into operation prior to revision of the source's Part 70 Operating Permit to incorporate the required operation conditions.

The proposed operating conditions applicable to these emission units are attached to this Source Modification approval. These proposed operating conditions shall be incorporated into the Part 70 operating permit as an administrative amendment in accordance with 326 IAC 2-7-10.5(l)(1) and 326 IAC 2-7-11.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter call (800) 451-6027, press 0 and ask for Aida De Guzman or extension (3-4972), or dial (317) 233-4972.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Management

Attachments
APD
cc: File -Cass County
U.S. EPA, Region V
Cass County Health Department
Air Compliance Section Inspector- Ryan Hillman
Compliance Data Section - Karen Nowak
Administrative and Development - Janet Mobley
Technical Support and Modeling - Michele Boner

PART 70 MINOR SOURCE MODIFICATION
OFFICE OF AIR MANAGEMENT

BTR Antivibration Systems, Incorporated
One General Street
Logansport, Indiana 46947

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this approval.

This approval is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Source Modification No.:017-11310-00014	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

SECTION D FACILITY OPERATION CONDITIONS

The change in the coating applied by the existing permitted Chain-On-Edge Coater, ID7230, with a capacity of 1,750 pieces per hour.

Emission Limitations and Standards

1. Volatile Organic Compounds 326 IAC 8-1-6

Any change or modification that would increase the VOC potential to emit from the Chain-On-Edge Coater, ID7230 to 25 tons per year or greater would require prior approval before such change may occur.

2. Air Toxic Control 326 IAC 2-4.1-1

Any change or modification that would increase the single HAP or combined HAPs potential to emit from the Chain-On-Edge Coater, ID7230 to ten (10) tons per year or twenty-five (25) tons per year or greater respectively would require prior approval and be subject to 326 IAC 2-4.1-1 before such change may occur.

3. Particulate Matter (PM) [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3-2 (Process Operations), the particulate matter (PM) emissions from the Chain-On-Edge Coater ID7230 shall be limited as follows:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

Compliance Determination Requirements

4. Testing Requirements [326 IAC 2-1.1-11]

The Permittee is not required to test this emissions unit by this permit. However, IDEM may require compliance testing when necessary to determine if the emissions unit is in compliance. If testing is required by IDEM, compliance with the VOC and HAP limits specified in Conditions no. 1 and no. 2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

5. Volatile Organic Compounds (VOC)

Compliance with the VOC and HAP content and usage limitations contained in Conditions no. 1 and no. 2 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAM, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

6. Record Keeping Requirements

The Permittee shall log information necessary to document compliance with Conditions no. 1 and no. 2. The information shall be kept for at least the past 36 month period and made available upon request to the Office of Air Management (OAM).

Indiana Department of Environmental Management
Office of Air Management

Technical Support Document (TSD) for a Minor Source Modification

Source Background and Description

Source Name:	BTR Antivibration Systems, Incorporated
Source Location:	One General Street, Logansport, Indiana 46947
County:	Cass
SIC Code:	3069
Operation Permit No.:	T017-7639-00014
Operation Permit Issuance Date:	September 2, 1999
Minor Source Modification No.:	017-11310-00014
Permit Reviewer:	Aida De Guzman

The Office of Air Management (OAM) has reviewed a modification application from BTR Antivibration Systems, Incorporated relating to the construction and operation of the following new equipment to be used in the manufacture of rubber parts for the automotive industry and other types of industries:

(a) Thirteen (13) new rubber injection molding presses, identified as JD0003 through JD0015. Each molding press has a capacity of 68 pounds per hour; and

(b) The change in the coating applied by the existing permitted Chain-On-Edge Coater, ID7230, with a capacity of 1,750 pieces per hour.

History

On September 1, 1999, BTR Antivibration Systems, Incorporated submitted an application to the OAM requesting to add the above equipment to their existing plant. BTR Antivibration Systems, Incorporated was issued a Part 70 permit on September 2, 1999.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (^{0}F)
Coater 7230	Coating operation	26	2	2,000	ambient

Recommendation

The staff recommends to the Commissioner that the Minor Source be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on September 1, 1999, with additional information received on September 10, 1999.

Emission Calculations For the New Equipment:

(a) Injection Molding Presses Emissions:

Injection molding press is a form of platen press. The press is clamped shut and a raw rubber is injected into the die. Heat is applied and the rubber vulcanizes into a stable form. Because the die is closed, no emissions occur during the vulcanization process. VOC is emitted when the die is opened and the parts are ejected. All organics from this process condense at temperatures far below 0^0C and as such would not be likely to cause any condensible particulate emissions.

The organic emission factors used in the calculations were taken from a report in one of the series of volumes published (Profile of the Rubber and Plastic Industry) by OAQPS of the USEPA. These factors were developed in a study commissioned by the Rubber Manufacturers Association (RMA). These factors are found on Table 4.12-8 of the RMA Study.

The emission factors are based on the worst case rubber stock.

ORGANIC EMISSIONS			
Pollutant	Throughput (lb/hr)	Emission Factor (lb/lb)	VOC Emissions
VOC	68	1.68×10^{-3}	0.5 ton/yr per mold press 6.5 ton/yr for 13 mold presses
HAP -Acetophenone	68	4.4×10^{-4}	0.13 ton/yr per mold press 1.7 ton/yr for 13 mold presses

(b) Chain-On-Edge Coater #7230:

VOC AND PM OVERSPRAY EMISSIONS									
Material Name	Density (lb/gal)	Gallon of Material (gal/unit)	Maximum (unit/hour)	Weight % Organics	Pounds of VOC per gallon of coating less water	Pounds of VOC per Day	Tons of VOC per Year	Transfer Efficiency	PM Emissions (tons/year
Adhesive	7.9	0.00032	1750	83%	6.59	88.27	16.11	50%	1.6

Methodology:
VOC Emissions, tons/yr = Density, lb/gal * weight % Organics * Gal of Material, gal/unit * Maximum Number of unit/hour * 8760 hr/yr * ton/2000 lb
PM Overspary Emissions, tons/yr = Maximum Number of unit/hour * Gal of Material, gal/unit * Density, lb/gal * (1- Wt % organics) * (1- transfer efficiency) * 8760 hr/yr * ton/2000 lb
HAPs Emissions = Density, lb/gal * Gal of Material, gal/unit * Maximum Number of unit/hour * Weight % HAP * 8760 hr/yr * ton/2000 lb

HAPs EMISSIONS											
Material Name	Density (lb/gal)	Gallon of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Toluene	Weight % Ethylben-zene	Weight % Lead Compound	Xylene Emissions (tons/yr)	Toluene Emissions (tons/yr	Ethylbenzene Emissions (tons/yr)	Lead Compound Emissions (ton/yr)
Adhesive	7.9	0.00032	1750	34.2%	46.5%	2.3%	3.9%	6.6	9.0	0.45	0.76
Total Single HAP Emissions									9.0		
Total Combined HAPs									16.81		

Potential To Emit (Before Control)

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA.”

Pollutant	Potential To Emit (tons/year)
PM	1.6
PM-10	1.6
SO_2	0.0
VOC	16.11
CO	0.0
NO_x	0.0

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential To Emit (tons/year)
Xylene	6.6
Toluene	9.0
Ethylbenzene	0.45
Lead Compound	0.76
TOTAL	16.81

Justification for the Permit Level

The Title V permit is being modified through a Minor Source Modification. This modification is being made pursuant to 326 IAC 2-7-10.5(d)(4), since the proposed new equipment have a total PTE for any regulated pollutant within the threshold for a Minor Source Modification under this rule.

Actual Emissions

No previous emission data has been received from the source.

Limited/Controlled Potential to Emit

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units.

	Limited Potential to Emit (tons/year)							
Process/facility	PM	PM-10	SO_2	VOC	CO	NO_x	Single HAP	Combined HAPs
Proposed New Equipment	1.6	1.6	0.0	16.11	0.0	0.0	9.0	16.8
Total	1.6	1.6	0.0	16.11	0.0	0.0	9.0	16.8

County Attainment Status

The source is located in Cass County.

Pollutant	Status (attainment, maintenance attainment, or unclassifiable; severe, moderate, or marginal nonattainment)
PM-10	attainment
SO_2	attainment
NO_2	attainment
Ozone	attainment
CO	attainment
Lead	attainment

(a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC and NO_X emissions are considered when evaluating the rule applicability relating to the ozone standards. Cass County has been

designated as attainment or unclassifiable for ozone.

Federal Rule Applicability

(a) New Source Performance Standards (NSPS)
There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.

(b) National Emission Standards for Hazardous Air Pollutants (NESHAPs)
There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR art 63) applicable to this source.

State Rule Applicability - Entire Source

(a) IAC 2-6 (Emission Reporting)
This source is located in Cass County, and does not have the potential to emit any criteria pollutant at the rate of 100 tons per year or greater, therefore, 326 IAC 2-6 does not apply.

(b) 326 IAC 5-1 (Visible Emissions Limitations)
Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

(1) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(2) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

(a) 326 IAC 8-2-9 (Miscellaneous Metal Coating)
The Chain-On-Edge Coater #7230 is not subject to this rule, because its SIC code of 3069 is not one of the listed SIC codes that are subject to this rule.

(b) 326 IAC 8-1-6 (General Reduction Requirements)

(1) The Chain-On-Edge Coater #7230 is not subject to this rule, because its potential VOC emissions are less than 25 tons per year.

(2) The Injection molding press JD0003 through JD0015 are each considered a separate facility, since the material processed from each molding press is not processed sequentially in any other facility.

Each molding press has a potential VOC emissions less than 25 tons per year. Therefore, each is not subject to 326 IAC 8-1-6.

(c) 326 IAC 8-6-1 (Organic Solvent Emissions Limitation)
The facilities in this application are not subject to this rule, because their potential VOC emissions are far less than the applicability threshold of 100 tons per year.

(d) 326 IAC 2-4.1-1 (New Source Toxic Control)
The proposed new facilities are not subject to this rule, because no single HAP at a rate of 10 tons per year or greater, nor combined HAPs is emitted at a rate of 25 tons per year or greater.

(e) 326 IAC 2-7-1(21) Insignificant Activity
Each injection molding press JD0003 through JD0015 has a VOC and HAP emissions less than the threshold in 326 IAC 2-1.1-3(d)(1). Therefore, each press is considered an insignificant activity.

(f) 326 IAC 6-3-2 (Process Operations: Particulate Matter Emissions Limitation)

(1) The PM overspray emissions from the Chain-On-Edge Coater # 7230 is subject to 326 IAC 6-3-2. This rule mandates a PM emissions limit using the following equation:

$E = 4.10\ P^{0.67}$

Where: E = PM emissions limit in pounds per hour
P = process weight rate in tons per hour

(2) The PM emissions from each of the injection molding presses JD0003 through JD0015 are subject to 326 IAC 6-3-2. This rule mandates a PM emissions limit as follows:

Each injection molding process weight rate is less than 100 pounds per hour (lb/hr), the PM emissions limit is 0.551 lb/hr.

Each injection molding is in compliance because no PM is emitted from the rubber molding. All the organics emitted condense at temperature far below 0 ^{0}C and as such would not likely to cause any condensible particulate matter.

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Part 70 Application Form GSD-08.

(a) This source will emit levels of air toxics less than those which constitute a major source according to Section 112 of the 1990 Clean Air Act Amendments.

(b) See detailed calculations on page 3 of this TSD.

Conclusion

The operation of the proposed new facilities shall be subject to the conditions of the attached proposed **Minor Source Modification 017-11310-00014.**

Appendix A: Emission Calculations
Natural Gas Combustion Only
MM Btu/hr 0.3 - < 10
Commercial Boiler

Company Nai **BTR Antivibration Systems, Incorporated**
Address City **One General Street, Logansport, IN 46947**
CP: **017-11310**
Plt ID: **017-00014**
Reviewer: **Aida de Guzman**
Date: **June 24, 1997**

1 Air make-up @ 5 mmBtu/hr
1 Air make-up @ 4.4 mmBtu/hr

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
9.4	82.3

	Pollutant					
	PM	PM10	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	12.0	12.0	0.6	100.0	5.3	21.0
Potential Emission in tons/yr	0.5	0.5	0.0	4.1	0.2	0.9

Methodology

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Emission Factors for NOx: uncontrolled = 100, Low Nox Burner = 17, Flue gas recirculation = 36

Emission Factors for CO: uncontrolled = 21, Low NOx Burner = 27, Flue gas recirculation = ND

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-03-006-03

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton